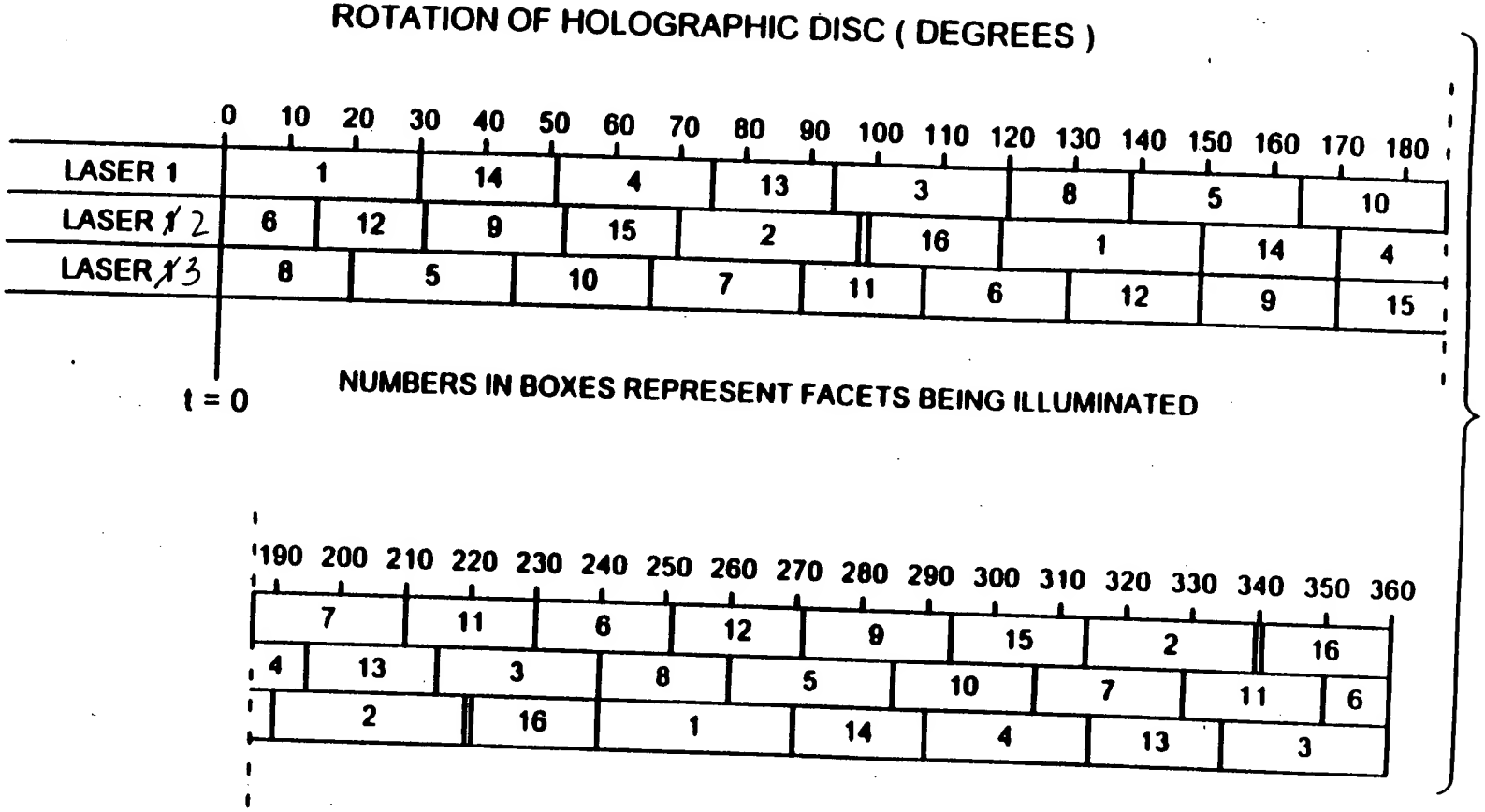

FIG. 5A

FACET LIGHT COLLECTION EFFICIENCY

Z = DISTANCE FROM SCAN POINT ON LABEL (MAX = FOCAL) LENGTH PLUS 5 INCHES)

A ~~Area~~ = AREA OF CORRESPONDING FACET

R = RADIUS OF EFFECTIVE CIRCULAR APERTURE

R.pr = RADIUS OF PROJECTED EFFECTIVE CIRCULAR APERTURE

B = ANGLE BETWEEN OUTGOING BEAM AND THE DISC SURFACE

δ = HALF-ANGLE SUBTENDED BY EFFECTIVE PROJECTED CIRCULAR APERTURE

E.L = LAMBERTIAN LIGHT COLLECTION EFFICIENCY

FIG. 10K

$$R_{pr} := \sqrt{\frac{\chi A \sin B}{\pi}} \qquad \delta := \operatorname{atan}\left[\frac{R_{pr}}{Z}\right]$$

$$E_L := (\sin(\delta))^2$$

FIG. 10L1

FOR FACET 16 :

Z := 70 inches

A := 4.7 square inches

B := 48.2 deg

$$\deg = \frac{\pi}{180}$$

E_L := 0.00022756

FIG. 10L